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Claims

1. Use, particularly in vitro use, of one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof in a process, whereby the process is selected from the group comprising angiogenesis, neovascularization, transmyocardial revascularization, wound healing, angiogenesis following wounding, epithelialization and healing of tooth and bone implants,

whereby the nucleic acid(s) is/are one(s) that code(s) for HMGB1 or a part thereof.

2. Use of one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof for the manufacture of a medicament for the prevention and/or treatment of a disease, whereby the disease is selected from the group which is related to lacking or excessive angiogenesis or neovascularization or wound healing, or requires transmyocardial revascularization,

whereby the nucleic acid is one that codes for HMGB1 or a part thereof.

3. Use, particularly in vitro use, of one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof for a process, whereby the process is selected from the group comprising angiogenesis, neovascularization, transmyocardial revascularization, wound healing, angiogenesis following wounding, epithelialization and healing of tooth and bone implants,

whereby the nucleic acid(s) is/are selected from the group comprising genes for the high mobility group proteins.

4. Use of one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof for the manufacture of a medicament for the prevention and/or treatment of a disease, whereby the disease is selected from the group which is related to

lacking or excessive angiogenesis or neovascularization or wound healing, or requires transmyocardial revascularization,

whereby the nucleic acid(s) is/are selected from the group comprising the genes for high mobility group proteins.

5. Use of one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof for the manufacture of a medicament for the prevention and/or treatment of a disease, particularly of claim 2 and/or claim 4, characterised in that the disease is selected from the group comprising diabetic retinopathy, proliferative retinopathia diabetica, diabetic nephropathy, macular degeneration, arthritis, endometriosis, pannus, histiocytosis, psoriasis, rosacea, small varicose veins, eruptive hemangioma, tumor diseases, cavernoma, lip angioma, haemangiosarcoma, haemorrhoids, arteriosclerosis, angina pectoris, ischemia, infarction, basalioma, squamous carcinoma, melanoma, Kaposi's sarcoma, tumors, gestosis, infertility, acute traumatic wounds, thermal wounds, chemical wounds, surgical wounds and chronic wounds.

6. Use according to claim 5, characterised in that the chronic wound is selected from the group comprising decubitus, ulcus cruris, ulcus cruris venosum, ulcus cruris arteriosum, diabetic ulcer, decubital ulcer, chronic post-traumatic wound and diabetic foot ulcers.

7. Use according to any of claims 3 to 6, characterised in that the high mobility group protein is selected from the group comprising the HMGA family, the HMGB family and the HMGN family.

8. Use according to any of claims 3 to 7, characterised in that the high mobility group protein is selected from the HMGB family.

9. Use according to claim 8, characterised in that the high mobility group protein is selected from the group comprising HMGB1, HMGB2 and HMGB3.

10. Use according to claim 9, characterised in that the high mobility group protein is HMGB1.

11. Use according to any of claims 3 to 7, characterised in that the high mobility group protein is selected from the HMGA family.

12. Use according to claim 11, characterised in that the high mobility group protein is selected from the group comprising HMGA1a, HMGA1b, HMGA1c and HMGA2.

13. Use according to claim 12, characterised in that the high mobility group protein is HMGA1a.

14. Use according to any of the preceding claims, characterised in that one high mobility group protein is selected from the HMGA family, and a second high mobility group protein is selected from the HMGB family, whereby the protein of the HMGA family is preferably HMGA1a and the protein of the HMGB family is preferably HMGB1.

15. Use according to any of the preceding claims, characterised in that additionally VEGF and/or a nucleic acid coding therefor, is used.

16. A method for affecting angiogenesis or neovascularization or wound healing of a tissue comprising the following steps:

- a) providing a tissue or a part thereof,
- b) adding one or several nucleic acid(s), transcription product(s) thereof and/or translation product(s) and
- c) incubating the tissue with the nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof,

whereby the nucleic acid(s) is/are selected from the group comprising the genes for the high mobility group proteins, and, optionally,

- d) obtaining or recovering the tissue or an intermediate thereof.

17. The method according to claim 16, characterised in that the tissue or a part thereof is incubated with VEGF and/or a nucleic acid coding therefor.

18. The method according to claims 16 or 17, characterised in that the method is an *in vitro* method.

19. The method according to any of claims 16 to 18, characterised in that the tissue is an explanted tissue or an *in vitro* cultured tissue.

20. The method according to any of claims 16 to 19, characterised in that the nucleic acid(s), the transcription product(s) thereof and the translation product(s) thereof is/are such as described in any of the preceding claims.

21. The method according to any of claims 16 to 20, characterised in that two or more of the HMGB proteins or of the nucleic acid(s) coding therefor are used, whereby preferably one high mobility group protein is selected from the HMGA family and a second high mobility group protein is selected from the HMGB family, whereby the protein of the HMGA family is preferably HMGA1a, and the protein from the HMGB family is preferably HMGB1.

22. Use according to any of the preceding claims, characterised in that in addition to the nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof, whereby the nucleic acid is selected from the group comprising the genes for the high mobility group protein, a nucleic acid, the transcription product thereof or the translation product thereof, is used, whereby the nucleic acid is selected from the group comprising the gene for vascular endothelial growth factor.

23. A pharmaceutical formulation comprising one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof, as described in any of the preceding claims, and a pharmaceutically acceptable carrier.

24. A carrier material comprising one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof, whereby the nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof is/are such as described in any of the preceding claims.

25. The carrier material according to claim 24, characterised in that the carrier material consists of a material which is selected from the group comprising cellulose, agarose, collagen, silicone, silicon, plastics, gels, hydrogels, matrices based on fibrin, man-made continuous filament yarn, hydrocolloids, lipocolloids, polyurethane, polyurethane resins, plaster, synthetic biomaterials, thermoplastic plastics, zinc glue, polyester foam, polyisobutylene, buffer, stabilizers, bacteriostatics and moisturizer.

26. The carrier material according to claims 24 or 25, characterised in that the carrier material is serving as an implant or for wound healing.

27. A wound cover material comprising a basic cover material and one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof, whereby the nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof is/are such as described in any of the preceding claims.

28. The wound cover material according to claim 27, characterised in that the cover material is selected from the group comprising hydrocolloidal dressings, calcium alginate dressings, compresses and overlays of activated carbon, overlays of foamed plastic, film dressings, transparent dressings, silicone foam dressings, fleece overlays, hydrocellular dressings, hydroselective wound overlays, absorbing wound pads, spray dressings, gauze of man-made continuous filaments, cotton gauze, paraffin gauze, silver coated wound dressings and hydropolymer/foam dressings.

29. A formulation comprising one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof, whereby the nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof is/are such as described in any of the preceding claims, and a carrier phase, whereby the carrier phase is preferably selected from the group comprising creams, fatty ointments, emulsions (oil in water (O/W); water in oil (W/O); water in oil in water (W/O/W)); microemulsions, modified emulsions, nanoparticles/nanoemulsions, liposomes, hydrodispersion gels (hydrogels, alcoholic gels, lipogels, tenside gels), gel-creams, lotions, oils/oil baths and sprays.

30. A method for the screening of a compound for promoting and/or inhibiting a process, whereby the process is selected from the group comprising angiogenesis, neovascularization, transmyocardial revascularization and wound healing, comprising the following steps:

- a) providing a test system for the process;
- b) providing a candidate compound; and
- c) testing the candidate compound and determining the reaction caused by the candidate compound in the test system.

31. A method for the screening of a compound for promoting and/or inhibiting a process, whereby the process is selected from the group comprising angiogenesis, neovascularization, transmyocardial revascularization and wound healing, comprising the following steps:

- a) providing a test system for the process;
- b) providing a reference compound;
- c) testing the reference compound in the test system and determining the reaction caused by the reference compound in the test system;
- d) providing a candidate compound;
- e) testing the candidate compound in the test system and determining the reaction caused by the candidate compound in the test system; and
- f) comparing the reaction of the reference compound in the test system to the reaction of the candidate compound in the test system.

32. A method for the screening of a compound for the promotion and/or inhibition of a process, whereby the process is selected from the group comprising angiogenesis, neovascularization, transmyocardial vascularization and wound healing, comprising the following steps:

- a) providing a test system for the process;
- b) providing a reference compound, whereby the reference compound has a marker;
- c) testing the reference compound in the test system and determining the reaction caused by the reference compound in the test system;
- d) providing the candidate compound; and
- e) testing the candidate compound in the test system, whereby the test system comprises the reference compound, and determining the reaction of the test system, whereby the amount of released reference compound and/or released marker of the reference compound is determined.

33. A method for the screening of a compound for the promotion and/or inhibition of a process, whereby the process is selected from the group comprising angiogenesis, neovascularization, transmyocardial vascularization and wound healing, comprising the following steps:

- a) providing a test system for the process;
- b) providing a candidate compound, whereby the candidate compound has a marker;
- c) testing the candidate compound in the test system and determining the reaction caused by the candidate compound in the test system;
- d) providing a reference compound; and
- e) testing the reference compound in a test system, whereby the test system comprises a candidate compound, and determining the reaction of the test

system, whereby the amount of released candidate compound and/or of released marker of the candidate compound is determined.

34. The method according to any of claims 30 to 33, characterised in that the test system is an *in vitro* test system or a *in vivo* test system.

35. The method according to any of claims 30 to 34, characterised in that the reaction of the reference compound and/or of the candidate compound is a promotion of the process, and whereby preferably the candidate compound is a compound for promoting the process if the reaction of the candidate compound in the test system is identical or more pronounced than the reaction of the reference compound.

36. The method according to any of claims 30 to 34, characterised in that the reaction of the reference compound and/or the candidate compound is an inhibition of the process, and whereby preferably the candidate compound is a compound for inhibiting the process, if the reaction of the test system caused by the candidate compound is a reaction which is less pronounced than the one caused by the reference compound in the test system.

37. The method according to any of claims 30 to 36, characterised in that the reference compound comprises one or several nucleic acid(s), the transcription product(s) thereof and/or the translation product(s) thereof, whereby the nucleic acid is selected from the group comprising genes for high mobility group proteins, preferably as defined in any of the preceding claims.

38. The method according to any of claims 30 to 36, whereby the process is the inhibition of angiogenesis.

39. Use of a method according to any of claims 30 to 38 for the screening of a compound for the treatment and/or prevention of a disease, whereby the test system provided is a test system for the respective disease.

40. Use according to claim 39, characterised in that the disease is selected from the group comprising diseases which require the promotion or inhibition of angiogenesis or neovascularization, or transmyocardial revascularization or wound healing.

41. Use according to claim 40, characterised in that the disease is selected from the group comprising diabetic retinopathy, proliferative retinopathia diabetica, diabetic nephropathy, macular degeneration, arthritis, endometriosis, pannus, histiocytosis, psoriasis, rosacea, small varicose veins, eruptive hemangioma, tumor diseases, cavernoma, lip angioma, haemangiosarcoma, haemorrhoids, arteriosclerosis, angina pectoris, ischemia, infarction, basalioma, squamous carcinoma, melanoma, Kaposi's sarcoma, tumors, gestosis, infertility, acute traumatic wounds, thermal wounds, chemical wounds, surgical wounds and chronic wounds.

42. Use according to any of claims 39 to 41, characterised in that the disease is a tumor disease, whereby preferably the tumor diseases comprise necrotic cells, preferably necrotic tumor cells.

43. Compound obtainable by a method according to any of claims 30 to 38.

44. Use of a compound according to claim 43 for the manufacture of a medicament, preferably for the treatment and/or inhibition of a disease, as defined in any of the preceding claims.

45. Use, particularly in vitro, of a nucleic acid, the transcription product thereof and/or the translation product thereof, for a process, whereby the process is selected from the group comprising tissue regeneration, repair of DNA damages, wound healing, cell mobility, angiogenesis in the wound area, epithelialization, tissue aging, prevention of tissue aging, rejuvenation of tissue, vascularization after cardiac infarction and healing of tooth and bone implants,

whereby the nucleic acid is selected from the group comprising genes for basic DNA binding proteins.

46. Use, particularly in vitro use, of a nucleic acid, the transcription product thereof and/or the translation product thereof, for a process, whereby the process is selected from the group comprising dedifferentiation of cells and re-programming of cells, for tissue build-up and/or

tissue regeneration, in particular based on dedifferentiation and/or differentiation of the tissue to be build up or to be regenerated,

whereby the nucleic acid is selected from the group comprising genes for basic DNA binding proteins.

47. Use of a nucleic acid, the transcription product thereof and/or the translation product thereof, for the manufacture of a medicament for prevention and/or treatment of a disease, whereby the disease is selected from the group comprising diseases which require the repair DNA damages, diseases which require tissue regeneration, diseases which require wound healing, diseases which go along with tissue aging, diseases which require tooth and bone implants, diseases which go along with tissue aging, wound healing disorders, skin diseases, xeroderma pigmentosum, leather skin, skin cancer, skin cancer after burn, skin aging after burn, burn and cardiac infarction,

whereby the nucleic acid is selected from the group comprising genes for basic DNA-binding proteins.

48. Use of a nucleic acid, the transcription product thereof and/or the translation product thereof, for the manufacture of a cosmetic product, preferably a cosmetic product for tissue regeneration, wound healing, prevention of leather skin, prevention of skin cancer, in particular skin cancer after sun burn, skin aging, in particular skin aging after sun burn, tissue aging inhibition and/or tissue juvenation,

whereby the nucleic acid is selected from the group comprising genes for basic DNA-proteins.

49. Use of a nucleic acid, the transcription product thereof and/or the translation product thereof for the manufacture of a medicament for the prevention and/or treatment of a disease, whereby the disease is selected from the group comprising skin diseases, xeroderma pigmentosum, leather skin, skin cancer, skin cancer after sun burn, sun burn, acute wounds and chronic wounds,

whereby the nucleic acid is selected from the group comprising genes for basic DNA-binding proteins.

50. Use according to claim 49, characterised in that the acute wound is selected from the group comprising acute traumatic wounds, thermal wounds, chemical wounds and surgical wounds.

51. Use according to claim 49, characterised in that the chronic wound is selected from the group comprising decubitus, ulcus cruris, ulcus cruris venosum, ulcus cruris arteriosum, diabetic ulcer, decubital ulcer, chronic post-traumatic wounds and diabetic foot ulcer.

52. Use according to any of claims 45 to 51, characterised in that the basic DNA-binding protein is selected from the group comprising high mobility group proteins.

53. Use according to any of claims 45 to 52, characterised in that the high mobility group protein is selected from the group comprising HMGA, HMGB and HMGN.

54. Use according to any of claims 45 to 53, characterised in that the high mobility group protein is a protein of the HMGA family.

55. Use according to claim 54, characterised in that the protein is selected from the group comprising HMGA1a, HMGA1b and HMGA2.

56. Use according to any of claims 45 to 55, characterised in that the nucleic acid is selected from the group comprising nucleic acids according to SEQ. ID. NO. 31 to SEQ. ID. NO. 64 and respective derivatives.

57. Use according to any of claims 45 to 56, characterised in that the translation product is selected from the group comprising polypeptides having a sequence according to SEQ. ID. NO. 1 to SEQ. ID. NO. 30 and the respective derivatives.

58. Use according to claim 57, characterised in that the protein comprises a modification, whereby the modification is selected from the group comprising phosphorylation and acetylation.

59. A method for the regeneration of tissue comprising the following steps:

- a) providing a tissue or a part thereof,
- b) adding a nucleic acid, the transcription product thereof and/or the translation product thereof; and
- c) incubating the tissue and the nucleic acid, the transcription product thereof and/or the translation product thereof,

whereby the nucleic acid is selected from the group comprising genes for basic DNA-binding proteins, and, optionally,

- d) obtaining or recovering the regenerated tissue or a intermediate form thereof.

60. The method according to claim 59, characterised in that the method is an in vitro method.

61. The method according to claim 59 or 60, characterised in that the tissue to be regenerated is different or identical to the tissue provided in step a).

62. The method according to any of claims 59 to 61, characterised in that the tissue to be regenerated and/or the tissue provided in step a) is/are independently selected from each other from the group comprising skin tissue, fatty tissue, cartilage tissue, muscle tissue, cells of the blood and of the haemogram and nerve cells.

63. The method according to any of claims 59 to 62, characterised in that the nucleic acid, the transcription product and/or the translation product is/are such as described in any of the preceding claims.

64. A method for the dedifferentiation and/or reprogramming of cells comprising the following steps:

- a) providing one or several cells,
- b) adding a nucleic acid, the transcription product thereof and/or the translation product thereof, and
- c) incubating the cell and the nucleic acid, the transcription product thereof and/or the translation product thereof,

whereby the nucleic acid is selected from the group comprising genes for basic DNA-binding proteins.

65. The method according to claim 64, characterised in that the method is an in vitro method.

66. The method according to claim 64 or 65, characterised in that the method further comprises the following step:

- d) obtaining a dedifferentiated and/or reprogrammed cell.

67. The method according to any of claims 64 to 66, characterised in that the dedifferentiated cell(s) and/or the reprogrammed cell(s) and/or the cell(s) provided according to step a) is/are independently selected from the group comprising cells of the epidermis, cells of the skin, cells of the fatty tissue, cells of the cartilage tissue, cells of the muscle tissue, cells of the blood, cells of the blood-forming tissues and nerve cells.

68. The method according to any of claims 64 to 67, characterised in that the nucleic acid, the transcription product thereof and/or the translation product thereof is as defined in any of the preceding claims.

69. Pharmaceutical formulation comprising a nucleic acid, a transcription product thereof and/or translation product thereof, as defined in any of the preceding claims, and a pharmaceutically suitable carrier.

70. A carrier material comprising a nucleic acid, the transcription product thereof and/or the translation product thereof, whereby the nucleic acid, the transcription product thereof and/or the translation product thereof is as defined in any of the preceding claims.

71. The carrier material according to claim 70, characterised in that the carrier material comprises a material selected from the group comprising cellulose, agarose, collagen, silicone, silicon, plastics, gels, hydrogels, matrices based on fibrin, man-made continuous filament yarn, hydrocolloids, lipocolloids, polyurethane, polyurethane resins, plaster, synthetic biomaterials, thermoplastic plastics, zinc glue, polyester foam, polyisobutylene, buffer, stabilizers, bacteriostatics and moisturizers.

72. The carrier material according to claims 70 or 71, characterised in that the carrier material is serving as an implant or for wound healing.

73. A wound covering material comprising a basic cover material and a nucleic acid, the transcription product thereof and/or the translation product thereof, whereby the nucleic acid, the transcription product thereof and/or the translation product thereof is/are as defined in any of the preceding claims.

74. The wound covering material according to claim 73, characterised in that the cover material is selected from the group comprising hydrocolloidal dressings, calcium alginate dressings, compresses and overlays of activated carbon, overlays of foamed plastic, film dressings, transparent dressings, silicone foam dressings, fleece overlays, hydrocellular dressings, hydroselective wound overlays, absorbing wound pads, spray dressings, gauze of man-made continuous filaments, cotton gauze, paraffin gauze, silver coated wound dressings and hydropolymer/foam dressings..

75. A cosmetic formulation comprising a nucleic acid, the transcription product thereof and/or the translation product thereof, whereby the nucleic acid, the transcription product thereof and/or the translation product thereof is as described in any of the preceding claims, and a carrier phase, whereby the carrier phase is preferably selected from the group comprising creams, fatty ointment, emulsions (oil in water (O/W); water in oil (W/O); water in oil in water (W/O/W)); microemulsions, modified emulsions, nanoparticles/nanoemulsions,

liposomes, hydrodispersion gels (hydrogels, alcohol gels, lipogels, tenside gels), gel-creams, lotions, oils/oil baths and sprays.

76. A method for the screening of a compound for promoting and/or inhibiting a process, whereby the process is selected from the group comprising tissue regeneration, repair of DNA damages, wound healing, cell mobility, angiogenesis in the wound area, epithelialization, tissue aging, inhibition of tissue aging, tissue rejuvenation, vascularization after cardiac infarction and healing of tooth and bone implants, comprising the following steps:

- a) providing a test system for the process;
- b) providing a candidate compound; and
- c) testing the candidate compound and determining the reaction caused by the candidate compound in the test system.

77. A method for the screening of a compound for promoting and/or inhibiting a process, whereby the process is selected from the group comprising tissue regeneration, a repair of DNA damages, wound healing, cell mobility, angiogenesis in the wound area, epithelialization, tissue aging, inhibition of tissue aging, tissue rejuvenation, vascularization healing of tooth and bone implants, comprising the following steps:

- a) providing a test system for the process;
- b) providing a reference compound;
- c) testing the reference compound in the test system and determining the reaction caused by the reference compound in the test system;
- d) providing a candidate compound;
- e) testing the candidate compound in the test system and determining the reaction caused by the candidate compound in the test system; and

- f) comparing the reaction of the reference compound in the test system with the reaction of the candidate compound in the test system.

78. A method for the screening of a compound for promoting and/or inhibiting a process, whereby the process is selected from the group comprising tissue regeneration, repair of DNA damages, wound healing, cell mobility, angiogenesis in the wound area, epithelialization, tissue aging, inhibition of tissue aging, tissue rejuvenation, vascularization after cardiac infarction and healing of tooth and bone implants, comprising the following steps:

- a) providing a test system for the process;
- b) providing a reference compound, whereby the reference compound comprises a label;
- c) testing the reference compound in the test system and determining the reaction caused by the reference compound in the test system;
- d) providing the candidate compound; and
- e) testing the candidate compound in the test system, whereby the test system contains the reference compound, and determining the reaction of the test system, whereby the amount of released reference compound and/or the amount of the released label of the reference compound is determined.

79. A method for the screening of a compound for promoting and/or inhibiting a process, whereby the process is selected from the group comprising tissue regeneration, a repair of DNA damages, wound healing, cell mobility, angiogenesis in the wound area, epithelialization, tissue aging, inhibition of tissue aging, tissue rejuvenation, vascularization after cardiac infarction and healing of tooth and bone implants, comprising the following steps:

- a) providing a test system for the process;

- b) providing a candidate compound, whereby the candidate compound comprises a label;
- c) testing the candidate compound in the test system and determining the reaction caused by the candidate compound in the test system;
- d) providing a reference compound; and
- e) testing the reference compound in the test system, whereby the test system contains the candidate compound, and determining the reaction of the test system, whereby the amount of released candidate compound and/or the amount of released label of the candidate compound is determined.

80. The method according to any of claims 76 to 79, characterised in that the test system is an *in vitro* test system or an *in vivo* test system.

81. The method according to any of claims 76 to 80, characterised in that the reaction of the reference compound and/or of the candidate compound is a promotion of the process, and whereby preferably the candidate compound is a compound for promoting the process if the reaction of the candidate compound in the test system is equal to or more pronounced than the reaction of the reference compound.

82. The method according to any of claims 76 to 80, characterised in that the reaction of the reference compound and/or of the candidate compound is an inhibition of the process and whereby preferably the candidate compound is a compound for the inhibition of the process if the reaction of the test system caused by the candidate compound is a reaction which is inferior to the reaction of the test system caused by the reference compound.

83. The method according to any of claims 76 to 80, characterised in that the reference compound is a nucleic acid, the transcription product thereof and/or the translation product thereof, whereby the nucleic acid is selected from the group comprising genes for basic DNA-binding proteins, particularly as defined in any of the preceding claims.

84. Use of a method according to any of claims 76 to 83 for the screening of a compound for the treatment and/or prevention of a disease, whereby the test system provided is a test system for the respective disease.

85. Use according to claim 84, characterised in that the disease is selected from the group comprising those requiring repair of DNA damages, requiring tissue regeneration, requiring wound healing, requiring tooth and bone implants, those going along with tissue aging, wound healing disorders, skin diseases, xeroderma pigmentosum, leather skin, skin cancer, skin after sun burn, skin aging after sun burn, sun burn and cardiac infarction.

86. Sun protection agent comprising at least a nucleic acid, the transcription product thereof and/or the translation product thereof, whereby the nucleic acid is selected from the group comprising genes for basic DNA-binding proteins.

87. Sun protection agent according to claim 86, characterised in that the basic DNA proteins are HMG proteins, particularly those described in any of the preceding claims.

88. Compound obtainable by a method according to any of claims 76 to 83 or a use according to claim 84 or 85.

89. Use of a compound according to claim 88 for the manufacture of a medicament, preferably for the treatment and/or prevention of a disease as described in any of the preceding claims.

90. A method for the treatment of an organism, characterised in that an effective amount of a DNA-binding protein, of a HMG protein, of a nucleic acid coding therefor or a transcription product thereof and/or a translation product thereof, a functional nucleic acid interacting therewith, a peptide interacting therewith or an antibody interacting therewith and/or a compound according to claim 89 is administered to the organism.

91. The method according to claim 90, characterised in that the organism is suffering from a disease or may suffer from said disease, or to fall ill with the disease, which is preferably a disease as described in any of the preceding claims.

Abstract

The invention relates to the use, especially in vitro, of one or more nucleic acids, the transcription product(s) thereof and/or the translation product(s) thereof for a process. Said process is selected from the group including angiogenesis, neovascularization, transmyocardial revascularization, wound healing, wound bed angiogenesis, epithelization and healing in of dental and bone implants. The nucleic acid(s) is/are selected from the group including the genes for high mobility group proteins.